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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,789	06/04/2001	Ricardo Osuna Leyva	10991679-1	5823

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

QIN, YIXING

ART UNIT	PAPER NUMBER
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2622

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/874,789	Applicant(s) LEYVA, RICARDO OSUNA	
	Examiner Yixing Qin	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

In response to applicant's amendment received 5/11/05, all requested changes have been entered.

Response to Arguments

In response to the 102 rejections, the Examiner has withdrawn them and is now rejecting everything under 103. In response to the rejections, the sorter in Ueda has a maximum operating speed of 60 sheets/minute as discussed before. This is essentially a selection of a speed that is limited the sorter attached to the printing device. For example, if another sorter was used, the maximum speed of another sorter might not be 60 sheets/minute. Thus, by having this particular sorter attached to the printer, there has to be communication that takes place so that the printer can identify this sorter as a type having a maximum speed of 60 sheets/minute.

As far as the argument for the list goes, the Examiner does agree that the use of a list of speeds is not explicitly disclosed, which leads to the withdrawal of the 102 rejection from the previous office action. However, the Examiner still believes that lists are an obvious way to communicate multiple pieces information. For example, if someone wanted to tell me how fast the printer in Ueda's invention can print, he would simply tell me it can print 0 to a maximum amount of sheets/minute. If he wanted to he can list it can print at 0, 1, 2, 3... sheets/minute.

Regarding claim 1, the Platteter reference is now being used to show an accessory device that is capable of operating at different input speeds.

I. Claims 1-4, 7-10, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (EPO Patent Application No. 0,571,194) in view of Platteter et al (U.S. Patent No. 5,629,775 – "Platteter")

1. Claim 1

A media-handling system comprising:

- Ueda et al discloses in column 1, lines 1-3 that their "...invention relates to a printing machine, e.g. for mimeographic printing, adapted to be connected with a sorter..." Further, in Fig. 3 and column 5, lines 58-59 disclose "... an operating panel 70 equipped with the mimeographic printing machine 30." In column 6, lines 6-7, Ueda et al discloses "...print speed set-up keys 74 for setting up a print speed..." One can see from Fig. 3, that there are two arrows for changing the speed of printing.

Art Unit: 2622

- The Ueda reference, however, does not go into great detail about the communication of a first accessory device's communication of its speed to the printer. However, the secondary reference, Platteter discloses in Figs. 1 and 2 and column, lines 27-28 that there are many devices connected to each other/and or the printer. Also, column 3, lines 51-55 discloses that "[e]ach finisher or feed device [can] control its own operation and each have its own specific timing and functionality specifications..." Furthermore, column 4, lines 17-29 that cycles or pitches are altered so that the printer can match the timing of the various attached devices. This indicates that a device can have a plurality of variable first input speeds because the mentioned lines from Platteter suggests that devices have to be in sync with each other (i.e. work at the same speed – since timing adjustments by skipping pitches or cycles is what controls speed). One of ordinary skill in the art would understand that these finishing devices would not necessarily work at the same speeds, and by matching the speeds of one finishing device to others, one can say that this finishing device has the capability to perform at varying speeds (i.e. **variable first input speeds**).
- Platteter discloses in column 4, lines 30-35 that the speed of the printer is matched to the slowest finishing device (i.e. its **output speed is set according to one of the first input speeds**).

2. Claim 2

- As mentioned in the claim 1 rejection above, the example given by Ueda et al discloses variable print speeds. The examiner interprets this as Ueda et al's invention has variable printer output speeds.
- Ueda et al discloses in column 4, line 2 "[a] paper feed unit..." which inputs paper to be printed. Although Ueda et al does not explicitly disclose that the paper feed unit inputs the paper in a variable rate, it would be obvious that different output speeds require different paper input speeds or else jamming of paper could occur. For example, if the printer were to print 10 sheets per minute, the inputting of 50 pages per minute from the paper feed unit would cause an abundance of paper in the printer and is likely to cause the jamming of the printer.

3. Claims 3 and 8

- Ueda et al discloses in Fig. 4 the various connections between the printing machine (30) (**print engine**) and the sorter (1). One can see from Fig. 4 that the CPU 100 of the printer can communicate with the controller 103 of the sorter. Also see the rejection to claim 8 above. Also note Fig. 3 and column 4, lines 10-21 of Platteter.

4. Claims 4 and 9

- Note again Fig. 3 and column 4, lines 10-16 of Platteter, which shows that a printer can communicate with various associated devices.

Art Unit: 2622

5. Claim 7

- Ueda et al discloses in column 1, lines 1-3 that their "...invention relates to a printing machine, e.g. for mimeographic printing, adapted to be connected with a sorter..." Further, in Fig. 3 and column 5, lines 58-59 disclose, "...an operating panel 70 equipped with the mimeographic printing machine 30." In column 6, lines 6-7, Ueda et al discloses "...print speed set-up keys 74 for setting up a print speed..." One can see from Fig. 3, that there are two arrows for changing the speed of printing. Ueda shows in Fig. 4 that a controller of the sorter and a CPU of the printing machine can talk to each other, and would be obvious that a print speed would be communicated.
- The second limitation of claim 7 has been addressed in claim 1.

6. Claim 10

- Again, referring to claim 3 above, from the Platteter reference, the printer is able to "interrogate" each device PWBA.

7. Claim 13

- The second device would be the sorter in Ueda's invention and the first device would be the printer, which has a plurality of output speeds.
- As mentioned above, the Examiner believes that lists are an obvious way to communicate multiple pieces of information. If there are multiple pieces or related information, it would be a simple task for one of ordinary skill to organize them into a list and transfer the information.
- Again, the selection of the speed by the sorter is essentially performed by the fact that this sorter has a maximum speed of 60 sheets/minute. Please also note the relevant lines in the Platteter reference as discussed in claim 1 above.
- The printing of the sheets is performed at the selected rate, or at a maximum of 60 sheets/minute due to the limitation of this speed by the sorter.

8. Claim 14

- From the rejection to the third limitation of claim 13 above, the given example disclosed that there was a single predetermined (maximum) speed for the sorter. (second device). One can simply eliminate the ability of this sorter to sort at any speed less than this maximum speed to arrive at a device only capable of processing printed material at a single speed.

9. Claim 15

- Ueda et al discloses in column 7, lines 16-27 that "...if the print speed data to be input by the print speed set-up keys 74 is 100 sheets/minute (100 r.p.m.), which exceeds the upper threshold, it will be substituted by 60 sheets/minute (60 r.p.m.), which is a predetermined speed [and]...if the print speed data to be inputted by the print speed setup keys 74 is equal to or less than 60 sheets/minute, it is unnecessary to change the print speed data." This indicates that the printer in Ueda et al's invention in the given example will print at any of

Art Unit: 2622

60 sheet/minute or less to match the input speed of the sorter. Lines 28-34 of column 7 further describes the purpose for the limiting speed.

10. Claim 16

- From the rejection to claim 15 above, it is shown that the sorter in Ueda et al's invention in the given example can handle input speeds of 60 sheet/minute or less.

11. Claim 17

- As mentioned above, in the rejection to claims 15 and 16, the given example implies that any print speed (output speed from the printing mechanism) of 60 sheet/minute or less can be matched by the sorter.

II. Claims 5, 6, 11, 12, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ueda et al (EPO Patent Application No. 0,571,194) in view of Platteter et al (U.S. Patent No. 5,629,775 – "Platteter") and further in view of Fietze et al (U.S. Patent No. 6,241,404)

12. Claims 5 and 11

- Ueda does not explicitly disclose the use of more than one accessory device. However, in looking at Figs. 1 and 2 of Platteter, one can see that, for example, DFD #3 is a first accessory and DFD #4 is a second accessory device. Also note column 3, lines 18-21 of Platteter. Platteter discloses in column 4, lines 10-21 that the printer can communicate with each associated device, but does not go into detail about devices communicating with each other.
- However, as mentioned in the previous office action, Fietze et al, discloses in Fig. 4 and 5 an OAM (output accessory manager), which as described in the second and third lines of the abstract, is part of a "...main copier and/or printer unit..." In column 5, lines 57-58, Fietze et al discloses that "...control messages [for the POPD [paper object processing device, such as those disclosed in Fig. 3]...are sent by the OAM." Also, Fietze et al discloses in Fig. 5 that the OAM communicated messages to a first POPD (paper object finishing device), and can receive messages from an nth POPD. Some of the information that can be received are the prep_time and flow_time data in table 1 in column 9. Column 9, lines 36-37 discloses that "...the timing values...are forwarded to the next downstream device." Although these times are not necessarily the input speed of a particular device, their goal is to enable the system to know how quickly a paper object can be processed (i.e. how long it takes to staple or stack). Column 8, lines 49-56 of Fietze et al describes the job control sequence. One can see

Art Unit: 2622

from table 1 that there are varying prep and flow time values, which indicates that there is a **second input speed** given that, for example, the stapler is the first accessory device and the stacker is a second accessory device.

13. Claims 6 and 12

- Again, this goes back to the rejection in claim 1. Since Platteter discloses a plurality of accessory devices connected to a printer, it would be obvious that a second accessory device would have a second input speed that can be variable, much like a first accessory device can have a first variable input speed.

14. Claim 18

- Although the Ueda et al reference discloses the connection of a printer with a sorter, it does not explicitly disclose that there is a second or a third device that could be added to the system. The secondary reference, Fietze et al, discloses in Fig. 1 a plurality of finishing devices and in Fig. 2 examples of how they could be interconnected to a printer and each other.
- The Fietze et al reference addresses limitations two and three. Fietze et al discloses in Fig. 6 the relaying of POHs (paper object headers) through a variety of processing devices. Item 70 is a bypass (column 9, line 11). Item 72 is a collator/stapler (column 9, line 12). Item 74 is a stacker (column 9, line 13)
- Table 1 in column 9 shows the prep_time and flow_time data for the various processing devices. Although these times are not necessarily the input speed of a particular device, their goal is to enable the system to know how quickly a paper object can be processed (i.e. how long it takes to staple or stack).
- Furthermore, Fietze et al discloses in column 9, lines 40-43 that "[b]ecause, as mentioned above, the first response requests additional delay, POH1.1 is sent through the route again, containing new flow time information (it is assumed that one frame is equal to 500 milliseconds). This gives each POPD the opportunity to update its time table." By running the POH1.1 through the all the POPDs again, each device is able to get the time values associated with every other device.
- Although the Fietze reference measures the flow of each device through time, it is understood that speed (such as sheets/min or mm/sec) is simply another way of measuring the flow of paper through a processing device.
- Again, both references are in the art of finishing device management for a printing system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to improve Ueda's invention with the OAM and its ability to communicate to a plurality of finishing devices. The motivation would be to expand the number of finishing devices a printing device can communicate with to provide further functionality such as stapling, collating, etc. Also, this would enable various devices to operate at an optimal speed for maximum paper processing output.

15. Claim 19

Art Unit: 2622

- Again, as mentioned, the Ueda et al reference does not disclose a third device. The secondary reference, Fietze et al mentions timings, it does not explicitly disclose the synchronization of the devices to one another due to these timings. However, the third reference, Platteter, discloses in column 4, lines 21-26, that synchronization of devices "...includes timing adjustments such as altering the pitch or cycles of the attached device. For example, the logic and circuitry 24B and 28B adjust to new timing information from SCB 22 to skip pitches or change timing cycles to maintain timing compatibility with the printer 10 and with one another." This ability to skip pitches ensures that the output speeds of one device can be matched to the input speed of the another device processing the output of the one device.
- Since all three references are in the art of finishing device management, it would be obvious to one of ordinary skill in the art at the time of the invention to improve Ueda et al's invention further with additional devices that can synchronize themselves with one another. The motivation would be to allow ensure that a printing system with multiple finishing or processing devices can be appropriately synchronized to improves printing efficiency and to prevent errors such as jamming.

16. Claim 20

- Platteter et al discloses in column 3, lines 21-23 that "[t]he devices are attached to each other such that sheets or sets of paper can be transferred from one device to another."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381.


The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (571)272-7402. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2622

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YQ


EDWARD COLES
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENT